IN THE SPECIFICATION:

Please amend the paragraph starting at page 1, line 18, and ending at page 3, line 9, as follows.

--Head mount displays (hereinafter referred to as "HMD") are used for observation of a magnified image with one eye. However, such a display requires a large optical space for the image magnification for observation, and are not useful for non-magnified image observation with both eyes from a usual long distance. Fig. 1 shows a display unit disclosed in Japanese Patent Application Laid-Open No. 10-170860. This apparatus has a smaller optical space. In Fig. 1, the numerals and the symbols denote the following: ~~followings:~~ 2, an ocular-side microlens array (pitch 70.8 μm); 3, a transmission-type liquid crystal display element (pitch 76.3 μm); 41, a light-condensing microlens array (pitch 81.8 μm); 42, a light-parallelizing microlens array (pitch 90 μm); 5, a flat backlight; 8, a diffusion hole sheet having apertures 9 serving as fine light spots (pitch 98.2 μm); E, an eyeball of an observer; and O, the pupil of the eyeball. In Fig. 1, microlenses R and S correspond to pixels P and Q, respectively. In Fig. 1, the dimensions of the parts of the display unit are as follows: A=18.85 mm, B=20.3 mm, C=21.77 mm, F=23.95 mm, G=26.13 mm, H=3 mm, D=3 mm, J=2 mm, K=2 mm, and M=25.9 mm. This display unit has an ocular optical system including microlenses for introducing the light beams emitted from the respective pixels. This display unit is provided to increase the light efficiency as the HMD by decreasing the thickness, but is not suitable at all for observation of an image with both eyes from a distant position. Specifically, as shown in Fig. 1, with the unit in which microlenses 2 are placed at the front side of liquid display element 3, when the image is observed with both eyes from a distant position, the visual axes of the both eyes intersect each other by convergence at the display element face (display face). However, the virtual image is formed apart from the element face by lens action of the microlenses 2. Therefore, the observed image is doubled. Accordingly, the displayed image cannot be

observed in a favorable state from a position distant from the display face. Moreover, the microlenses are decentered from the pixels, which may cause cross-talk owing to the light from the adjacent aperture to lower the image quality. Further, Moire may be caused between the boundary of the microlenses and the boundary of the pixels of the display elements to lower the picture image quality.--

Please amend the paragraphs starting at page 4, line 12, and ending at page 6, line 10, as follows.

--The present invention provides a display unit comprising ~~an~~ image displaying means having pixels arranged two-dimensionally, ~~a~~ plate-shaped illumination means having fine light-emitting points arranged two-dimensionally corresponding to the pixels of the image displaying means and being placed on the backside of the image displaying means, and fine optical elements for introducing light emitted from the fine light-emitting points arranged two-dimensionally corresponding to the pixels of the image displaying means to the respective pixels~~, wherein the each of the~~. The pixels and the fine optical element and the fine light-emitting point corresponding to the ~~pixel~~ pixels are arranged so that optical axes (the light ~~beam~~ beams passing through the respective optical centers) connecting the respective fine light-emitting points and the respective fine optical elements corresponding thereto pass through the pixels corresponding to the fine optical elements and the fine light-emitting points and intercross (intersect) substantially at a prescribed point within a distance of near point of vision of an eye from the display face of the image display means~~, and~~. Also, the fine optical elements form a virtual image of the fine light-emitting points corresponding thereto at a distance longer than a distinct vision distance of the eye from the prescribed point. The average eye has the near point of vision of 80 to 100 mm and the distinct vision distance of 250 mm. Therefore, in a general-purpose display, the distance between the aforementioned display face and the prescribed

position is set at about 5 to 50 mm, and the distance between the prescribed position and the virtual image of the fine light-emitting point is set in the range from 250 mm to infinity, preferably at about 1 to 5 m.

A conventional display unit for observation of a magnified virtual image like the aforementioned HMD has an ocular optical system on an observer side of the display face for the virtual image observation. The display unit of the present invention has fine optical elements and fine light-emitting points on the back side of the image displaying means to observe the magnified virtual images of the fine light-emitting points magnified by the fine optical elements through the image display means. In other words, the magnified virtual image of the fine light-emitting points is observed by employing the arrangement plane of the fine light-emitting points as the object plane. Thus, the present invention is based on an idea different in principle from the display units of the prior art. The display unit of the present invention does not employ the ocular optical system for forming a magnified virtual image, in order to enable reduction of the thickness and weight of the display unit.--

Please amend the paragraph starting at page 7, line 11, and ending at page 8, line 8, as follows.

--According to an aspect of the present invention, there is provided a display unit comprising ~~an~~ image displaying means having pixels arranged two-dimensionally, ~~a~~ plate-shaped illumination means having fine light-emitting points arranged two-dimensionally corresponding to the pixels and being placed on the backside of the image displaying means, and fine optical elements for introducing light emitted from the fine light-emitting points arranged two-dimensionally corresponding to the pixels, to the respective pixels~~, wherein the each of the~~. The pixels, and the fine optical ~~element~~ elements and the fine light-emitting ~~point~~ points corresponding to the ~~pixel~~ pixels are

arranged so that optical axes connecting the respective fine light-emitting points and the respective fine optical elements corresponding thereto pass through the pixels corresponding to the fine optical elements and the fine light-emitting points and the optical axes intercross (intersect) substantially at a prescribed point within a distance of a near point of vision of an eye from a display face of the image display means~~, and the~~. Further, the fine optical elements form a virtual image of the fine light-emitting points corresponding thereto at a distance longer than a distinct vision distance of the eye from the prescribed point.--

Please amend the paragraph starting at page 8, line 19, and ending at page 9, line 3, as follows.

--According to another aspect of the present invention, there is provided a display method, employing the aforementioned display unit~~, enabling~~. The method enables monocular observation of magnified displayed information from the ~~said~~ prescribed point or vicinity thereof by switching the barrier means to the aperture formation mode to allow the light of the surface light source to pass the apertures~~, and enabling~~. The method also enables binocular observation of non-magnified information from a distance longer than distinct vision distance from the display face of the image display means by switching the barrier means to the entire transmission mode.--

Please amend the paragraph starting at page 9, line 7, and ending at line 25, as follows.

--According to a further aspect of the present invention, there is provided a display unit comprising a reflecting-type display element having a reflection face having pixels and apertures corresponding to the pixels for transmitting light beams, a surface light source placed on the back face of the display element, and microlenses arranged two-

dimensionally in front of a display face of the display element corresponding to the pixels~~;~~ ~~wherein the~~. The microlenses, the pixels and apertures corresponding respectively to the microlenses are arranged such that the optical axes connecting the corresponding microlens, pixel, and aperture intercross (intersect) at substantially one point at a magnified image observation position at a distance shorter than the near point of vision in the opposite side of the display element relative to the two-dimensionally arranged microlenses~~, and~~. Also, the microlenses form a magnified virtual image of the corresponding apertures at a distance longer than the distinct vision distance.--

Please amend the paragraph starting at page 10, line 11, and ending at page 12, line 5, as follows.

--For achieving the above objects, the present invention provides a display unit which comprises ~~a~~ reflecting display elements, apertures on the reflecting face of the display elements for transmitting light beams in correspondence with the pixels on the display elements, a surface light source placed on the back side of the display elements, and microlenses in front of the display face of the display elements in correspondence with the pixels. The pixels of the display element are arranged in two dimensions. Therefore, the apertures and the microlenses are arranged similarly in two dimensions. The microlenses, the pixels and apertures corresponding respectively to the microlenses are arranged such that the optical axes connecting the corresponding microlens and aperture intercross roughly at one point at the magnified image observation position at a distance shorter than the near point of vision on the side opposite to the display elements relative to the two-dimensionally arranged microlenses, and that the microlenses form a magnified virtual image of the corresponding apertures at a distance longer than the distinct vision distance.--

Please amend the paragraph starting at page 15, line 16, and ending at line 24, as follows.

--In another example, reflecting liquid crystal elements are used which ~~has~~ have a reflection face in the imaging portion. With this type of display unit, a magnified image can be observed by magnifying the light from the light source by means of a magnifying optical system, and non-magnified image can be observed by reflected outside light at the reflection face without illumination by the light source. Specific example are described later as another embodiment.--

Please amend the paragraph starting at page 16, line 3, and ending at line 12, as follows.

--The display unit of a second embodiment of the present invention is constituted of a micro-spotlight illumination system comprising a surface light source, a barrier element controlled to select an entire light-transmission mode or a rectangular aperture-formation mode having fine rectangular apertures arranged in matrix, and microlenses (fine optical elements) focusing on the respective apertures~~; and a~~. The display unit also includes transmission-type liquid crystal display elements illuminated from the backside by the micro-spotlight.--

Please amend the paragraphs starting at page 19, line 10, and ending at page 20, line 14, as follows.

--Fig. 3 shows the optical principle for magnified image display in the display unit of Example 1 of the present invention. In Fig. 3, E indicates an eyeball; 121, a retina; 122, an eye lens; 101, a surface light source; 102, a barrier element which is controllable to switch between the entire transmission mode and the aperture formation mode; 103, a rectangular aperture of the barrier element 102 in the aperture-formation

mode; and 104, a microlens. Microlens 104 is focused roughly on rectangular aperture 103. Micro-spotlight 105 is constituted of surface light source 101, the rectangular aperture 103 of barrier element 102 in the aperture-formation mode, and microlens 104. The numeral 106 indicates a transmission-type display element; 107, a pixel of the transmission-type display element; and 108, a pupil face of eye E. Display unit 112 is constituted of micro-spotlights 105 and transmission-type display elements 106. The numeral 124 indicates the position of the virtual image. In Fig. 3, distance 131 ranges from 10 to 20 mm, and distance 132 ranges from 250 mm to infinity.

In the aperture-formation mode of barrier element 102, the respective light beams 123 emitted from the respective micro-spotlight 105 (the light beams having passed through rectangular aperture 103 and microlens 104) are projected to the transmission-type display element 106 from the backside, and the light fluxes having passed through pixels 107 are introduced from transmission-type display element 106 to pupil 108 of one eye E brought to a position nearer than the physiologically focusable limit distance (shorter than the near point of vision: e.g., 10 to 20 mm).--

Please amend the paragraphs starting at page 20, line 19, and ending at page 21, line 5, as follows.

--The virtual image of rectangular apertures 103 magnified by microlenses 104 should be formed at a distance longer than the distinct vision distance from the pupil surface 108. In this ~~Example~~ example, the distance is 2.8 m, which corresponds to observation of 59-inch screen at a distance of 2.8 m from the screen.

The distance L between the display face of the transmission-type display element 106 and pupil surface 108, the size D of the display face of the transmission-type display element 106, the focus length f of the microlenses, and the size W of the

rectangular aperture 103 are adjusted to satisfy the relation: $W \leq f \times D/L$, thereby preventing overlap of the virtual images of the adjacent pixels 107.--

Please amend the paragraphs starting at page 21, line 7, and ending at line 23, as follows.

--Fig. 4 shows the optical principle for non-magnified image display in the display unit having the same constitution as that in Example 1. In this Example, barrier element 102 is switched to the entire transmission mode for binocular observation of non-magnified image formed on the display face of transmission-type display element 106 at a distance longer than the distinct vision distance. The distance 131 ranges 250 to 300 mm. The numeral 135 indicates the focusing position explained later.

In Fig. 4, light 109 emitted from surface light source 101 passes through microlenses 104 which has the micro-spotlight function canceled, and illuminates nearly uniformly the transmission-type display element 106 from the backside. Thereby, the entire image on display element 106 could be observed binocularly from a distant position in an eye accommodation range.--

Please amend the paragraph starting at page 22, line 11, and ending at line 20, as follows.

--Fig. 6 shows the optical principle of display magnification in the display unit of Example 4 of the present invention. In this ~~Example~~ example, a refractivity-variable plate-shaped element 111 is employed as the microlenses. The liquid-crystal-type plate-shaped element 111 is switchable by voltage application to a microlens mode or to a non-refraction mode. Completely uniform backlight can be realized by combining plate-shaped element 111 in the non-refraction mode and barrier element 102 in a entire transmission mode.--

Please amend the paragraph starting at page 28, line 5, and ending at line 14, as follows.

--In this Example, the angle α of the light fluxes from the pixels on the periphery of display unit 210 decides the magnified image size. In this ~~Example~~ example, $\alpha=30°$ (diagonal screen angle). Magnified virtual image 224 of the apertures 203 magnified by microlenses 205 should be formed at a distance longer than the distinct vision distance (250 mm for average eyes). The distance is set at 2.8 m in this ~~Example~~ example, which corresponds to observation of a 59-inch screen at a distance of 2.8 m from the screen.--